Amendments to the Drawings:

Permission is respectfully requested to amend the drawings as shown in the attached annotated sheets. The attached sheets of drawings include changes to Fig. 1 and Fig. 8. The first sheet, which includes Fig. 1-3, replaces the original sheet including Fig. 1-3. In Fig. 1 labels 100 and 108 previously omitted have been added. The second sheet, which includes Fig. 8, replaces the original sheet including Fig. 8. One of the two 124C labels pointing to the same element has been deleted.

Attachment: Two Replacement Sheets.

Two Annotated Sheets Showing Changes.

Remarks and Arguments:

Claims 1 – 18 remain in this application. Claims 13 - 18 have been added to claim a method of displaying information in a centralized network management context clearly supported by the disclosure.

Amended independent claims 1, and 7 are respectively directed to a novel unified graphical user interface for network management system and a network management software application providing an improved way to inspect OSI Layer-3 manageable entities deployed in a managed communications network. The novel graphical user interface comprises a single graphical user interface window having two view panes displayed simultaneously. The first view pane displays OSI Layer-3 entities provisioned over OSI Layer-2 entities, while the second view pane simultaneously and selectively displays OSI Layer-2 entities corresponding to OSI Layer-3 entities selected in the first view pane. The novel graphical user interface improves the efficiency of operations management staff when performing path maintenance and diagnostic procedures respectively via the network management system and network management software application implementing the novel graphical user interface.

In contrast the Engel reference (U.S.P. 6,115,393) does not describe either a network management system nor a network management software application having a single graphical user interface window displaying simultaneously a first pane showing Layer-3 entities deployed in a managed communications network, and a second pane simultaneously and selectively showing Layer-2 entities over which a selected Layer-3 entity is provisioned. The Examiner points to column 26 lines 22-29 as describing a graphical user interface having a single window with two panes, the first pane displaying OSI Layer-3 entities and the second pane simultaneously and selectively displaying OSI Layer-2 entities corresponding to OSI Layer-3 entities selected in the first pane.

However, Engel at column 26 lines 22-29 states that in general "The network is represented by a logical map ... as shown in Fig. 17....The Management Workstation determines the topology of the network and informs the user of the network objects and their connectivity so that he (the user) can create the network map." Clearly Fig. 17 shows a representation of connected nodes at a single layer in a single pane in a single window. Further, Engel clearly teaches that the user is informed of connectivity between network objects so that the user can create the map, which is different from the operation of the present invention. The Examiner also refers to Fig. 19 of Engel, however Fig. 19 shows a generic protocol tree displaying relationships between protocols rather than relationships between managed entities.

In summary, Engel does not teach either a network management system nor a network management software application having a single graphical user interface window displaying simultaneously a first pane showing Layer-3 entities deployed in a managed communications network, and a second pane simultaneously and selectively showing Layer-2 entities over which a selected Layer-3 entity is provisioned. Engel describes instead network monitoring techniques using network monitoring equipment placed at strategic points in a communication network, packet inspection techniques performed on injected traffic, and techniques for derivation of communication information from packet contents.

Engel therefore fails to teach every element of amended claims 1 and 7. Claims 2-6, and claims 8-12 are variously dependent on claims 1 and 7, and include all the limitations thereof. For these reasons, the Applicant respectfully submits that amended claims 1-12 are not anticipated by Engel.

Furthermore, the abstract of the Engel reference being a concise summary, the techniques described by Engel represent processes outside the scope of the present invention. Therefore, it is respectfully submitted that the Engel reference represents non-analogous art.

Regarding Dev reference (U.S.P. 6,374,293), Dev does not describe either a network management system nor a network management software application having a single graphical user interface window displaying simultaneously a first pane showing Layer-3 entities deployed in a managed communications network, and second pane simultaneously and selectively showing Layer-2 entities over which a selected Layer-3 entity is provisioned. The Examiner points to column 12 lines 57-62 as describing a graphical user interface having a single window with two panes, the first pane displaying OSI Layer-3 entities and the second pane simultaneously and selectively displaying OSI Layer-2 entities corresponding to OSI Layer-3 entities selected in the first pane.

However, Dev at column 12 lines 57-62 states that hierarchical topological views are utilized to show connections between network elements geographically at the world level, national level, building level, and room level such that at the lower levels local area networks and subnetworks are shown. Clearly Dev describes representing physical connectivity between network elements in a single window in a single pane at each topological level, rather than simultaneous representations of OSI Layer-3 entities in a first view pane of a single graphical user interface window and OSI Layer-2 entities in a second view pane of the single graphical user interface window corresponding to OSI Layer-3 entities selected in the first view pane.

In summary, Dev does not teach either a network management system nor a network management software application having a single graphical user interface window displaying simultaneously a first pane showing Layer-3 entities deployed in a managed communications network, and a second pane simultaneously and selectively showing Layer-2 entities over which a selected Layer-3 entity is provisioned. Dev describes instead techniques of grouping network management entities in accordance with their physical location in rooms, buildings, local area networks, within nations. While these groupings provide hierarchical levels of grouping, these levels of grouping are different from the OSI hierarchy.

Dev therefore fails to teach every element of amended claims 1 and 7. Claims 2-6, and claims 8-12 are variously dependent on claims 1 and 7, and include all the limitations

thereof. For these reasons, the Applicant respectfully submits that amended claims 1-12 are not anticipated by Dev.

Furthermore the Examiner acknowledges at points 6a and 6g of the Office Action that according to Dev, the user is provided with site and geographical views to obtain necessary information regarding the stored configuration of a network. The techniques described by Dev represent methods outside the scope of the present invention, therefore, it is respectfully submitted that the Dev reference represents non-analogous art.

Similarly, independent method claim 13 relates to steps for managing a communications network in a centralized network management context via a graphical user interface by displaying in a first pane of a single graphical user interface window representations of OSI Layer-3 entities provisioned in the communications network over OSI Layer-2 entities; and simultaneously and selectively displaying in a second pane of the single graphical user interface window representations of OSI Layer-2 entities corresponding to at least one OSI Layer-3 entity selected in the first pane. Claimed method steps in claim 13 correspond to claimed elements of claims 1 and 7 and as discussed above, the method steps of claim 13 are not described by Engel nor by Dev.

Paragraph [0001] has been amended to specify that the invention relates to the inspection of managed OSI Layer-3 entities in a centralized network management context.

Applicant thanks the Examiner for pointing out the inadvertent clerical error on page 12 line 5 of the specification; amended paragraph [0044] corrects the clerical error.

Applicant has taken advantage of the Examiner's invitation to correct minor clerical errors in the specification at paragraphs [0006], [0014], [0045], [0057], [0064], and [0065]. Fig. 1 and 8 have also been amended to add labels to Fig. 1 and to delete a label from Fig. 8. The added labels to Fig. 1 simply label previously unlabeled elements with

similar labels used in labeling similar elements, therefore without introducing new subject matter. The deleted label from Fig. 8 was redundant as another label referred to the same element.

Applicant has further amended paragraphs [0058], and [0061] to emphasize the interaction of the analyst with the graphical user interface of the NMS system without introducing new subject matter.

Reconsideration and allowance are respectfully requested.

Respectfully submitted,

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Attachments